Merritt Parkway, Silvermine Avenue Bridge
Spanning Silvermine Avenue at the 16.84 mile mark
on the Merritt Parkway
Norwalk
Fairfield County
Connecticut

HAER No. CT-89

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
U.S. Department of the Interior
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HISTORIC AMERICAN ENGINEERING RECORD

Merritt Parkway, Silvermine Avenue Bridge

HAER No. CT-89

Location:	Spanning Silvermine Avenue at the 16.84 mile mark on the Merritt Parkway in Norwalk, Fairfield County, Connecticut UTM: 18.630820.4555105 Quad: Norwalk North, Connecticut
Construction Date:	1938
Engineer:	Connecticut Highway Department
Architect:	George L. Dunkelberger, of the Connecticut Highway Department, acted as head architect for all Merritt Parkway bridges.
Contractor:	Daniel Deering Construction Company Norwalk, Connecticut
Present Owner:	Connecticut Department of Transportation Wethersfield, Connecticut
Present Use:	Used by traffic on the Merritt Parkway to cross Silvermine Avenue
Significance:	The bridges of the Merritt Parkway were predominately inspired by the Art Deco and Art Moderne architectural styles of the 1930s. Experimental forming techniques were employed to create the ornamental characteristics of the bridges. This, combined with the philosophy of incorporating architecture into bridge design and the individuality of each structure, makes them distinctive.
Historians:	Todd Thibodeau, HABS/HAER Historian Corinne Smith, HAER Engineer August 1992

For more detailed information on the Merritt Parkway, refer to the Merritt Parkway History Report, HAER No. CT-63.

LOCAL HISTORY

In 1640, Roger Ludlow acquired land along the east side of the Norwalk River from the Long Island Sound to twelve miles inland. A couple of months later Daniel Patrick, a friend of Ludlow, purchased a similar amount of acreage on the west side of the river. These two acquisitions encompassed all of present-day Norwalk.[1]

Ten years passed between these purchases and settlement of the region. In 1650, Ludlow sold his land to residents of the Hartford Colony. That same year, these new owners moved to what is now East Norwalk, under the leadership of two surveyors, Richard Olmstead and Richard Webb. In 1651, Norwalk formed a town. The community gradually expanded as an agricultural and shipping center. At one point Norwalk included parts of Wilton, New Canaan, and Westport. By the beginning of the American Revolution, Norwalk included the districts of Norwalk, South Norwalk, East Norwalk, West Norwalk, Broad River, Silvermine, Winnipauk, and Cranbury.[2]

In summer 1779 the British burned more than 300 structures in the town. The community took several years to rebound from this loss, but by the early 1800s, Norwalk was again an expanding agricultural and shipping community. Larger scale industrial development commenced in 1848, when the New York, New Haven, and Hartford Railroad reached the Norwalk River. Norwalk became a hat-making center. The Volk Hat Company employed more than 500 workers. Other substantial enterprises developed, including the Norwalk Lock Company, Norwalk Iron Works, and Roth and Goldschmidt

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[1]-------, This Is Norwalk (Norwalk: League of Women Voters, 1963), 5.

[2]Samuel Richard Weed, Norwalk After Two Hundred and Fifty Years (South Norwalk: C. A. Freeman Publishers, 1901), 18-19.

Corset Company. Fueling this development was the arrival of large numbers of Irish and German immigrants.[3]

Following World War I, Norwalk experienced another population boom, as many New Yorkers who had vacationed in Norwalk for years settled permanently and began to commute. These new arrivals eagerly awaited completion of the Merritt Parkway. After it was finished, the parkway helped to accelerate the residential development of the western sections of the community, especially Winnipauk and Cranbury. During World War II watchtowers were established on the Merritt to spot airplanes and relay the information to Mitchell Field on Long Island.[4]

BRIDGE CONSTRUCTION HISTORY

Silvermine Avenue originates just south of the parkway at New Canaan Avenue/Route 123 and proceeds north until it turns into Mill Road near the region called Silvermine. The Daniel Deering Construction Company of Norwalk, Connecticut, received the contract to grade the Merritt Parkway from New Canaan Road/Route 123 to West Rocks Road, in Norwalk (ConnDot project #180-51). The contract for the Silvermine Avenue Bridge was also awarded to the Deering Construction Company (ConnDot project #180-113).[5] The bridge cost $19,916 and was completed in 1938. The paving work for this

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[3]This Is Norwalk, 5-6.

[4]Deborah Wing Ray and Gloria P. Stewart, Norwalk Being an Historical Account of That Connecticut Town, (Canaan, NH: Phoenix Publishing, 1979), 194, 200.
This Is Norwalk, 6.
"3000 Attend Merritt Parkway Opening; Hear Cross Voice Hope For Extension," Norwalk Hour, 30 June 1938, p. 1.

[5]Contract Card File, Map File and Engineering Records Department, Connecticut Department of Transportation, Wethersfield, CT.

region of the Merritt extended from Comstock Hill Road, in Norwalk, to West Rocks Road. This contract was assigned to the New Haven Construction Company of New Haven, Connecticut (ConnDot project# 180-95). The Silvermine Avenue Bridge has received little maintenance since it was built.[6]

BRIDGE DESCRIPTION

The Silvermine Avenue Bridge is a single-span, reinforced- concrete, barrel-type rigid-frame bridge. The frame spans 32'-8" over the road. Parallel wing walls, 29' and 41' long, form the approach for the overpass. The Merritt Parkway travels over the bridge on a 60' wide clear roadway at a grade of 5.29 percent.

The rigid-frame design allows the engineer to decrease the structural material at the center of the span, thus forming an arched opening. (See the Merritt Parkway History Report, HAER No. CT-63, for a more detailed description of the rigid-frame.) The intrados of the span rises over 3'-4" from the springline to the crown, while the extrados slopes at a 5.7 percent grade from the knees to the crown. The frame thickness at the crown is 22". The inner radius of the knee is 12", and the outer corner is squared with a notch. The inside face of each leg remains vertical for almost 12', and the outside face slopes to thicken the leg from 2'-2 at the base to 3' at the knee. The minimum clearance provided is over 14'-4" at a distance 10' perpendicular to the centerline of the road.

The architectural design of the Silvermine Avenue Bridge combines strong vertical and horizontal lines. The horizontal lines are distributed throughout the bridge height. A projecting coping band composed of several moldings runs across the bridge and wing walls, interrupted only at the main pylons and the end pylons. The block capital of the end pilaster of the frame leg wraps around onto the face

[6]Silvermine Avenue Bridge, DOT #717; Bridge Maintenance File, Engineering Department, Connecticut Department of Transportation, Newington, CT.

of the bridge. The railing is uninterrupted by intermediate posts, but conversely, the balusters create many closely spaced lines in elevation. Each baluster is hexagonal shaped with a corner facing outward. The emphasis on vertical lines is reinforced at the pylons. Each of the four pylons is a group composed of several rectangular pieces that step back and decrease in height from the center outward. The Connecticut coat of arms is on the inside of two pylons.

BIBLIOGRAPHY

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-------. This Is Norwalk. Norwalk: League of Women Voters, 1963.

Norwalk Hour. 1937-38.

-------. Contract Card File. Map File and Engineering Records Department, Connecticut Department of Transportation: Wethersfield, CT. This includes construction drawings, copies of which are in the HAER field records.

-------. Bridge Maintenance File. Engineering Department, Connecticut Department of Transportation: Newington, CT.

PROJECT INFORMATION

This recording project was undertaken by the Historic American Buildings Survey and the Historic American Engineering Record (HABS/HAER) Division of the National Park Service, Robert J. Kapsch, Chief. The Merritt Parkway recording project was sponsored and funded by the Connecticut Department of Transportation (ConnDot) and the Federal Highway Administration.

The fieldwork, measured drawings, historical reports and photographs were prepared under the general direction of Eric N. DeLony, HAER Chief, and Sara Amy Leach, HABS Historian.

The recording team consisted of Jacqueline A. Salame (Columbia University), architect and field supervisor; Mary Elizabeth Clark (Pratt Institute) and B. Devon Perkins (Yale University), architectural technicians; Joanne McAllister-Hewlings (US/ICOMOS-Great Britain, University of Sheffield), landscape architect; Corinne Smith (Cornell University), engineer; Gabrielle M. Esperdy (City University of New York) and Todd Thibodeau (Arizona State University), historians; and Jet Lowe, HAER photographer.